## FREQUENTLY ASKED QUESTIONS CONCERNING THE CLEAN-UP OF THE USMC F/A 18D FIGHTER AIRCRAFT UNIVERSITY CITY NEIGHBORHOOD

## PROVIDED BY THE SAN DIEGO COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

1. What environmental testing was done immediately after the jet crash to protect the health of people in the neighborhood and the first responders?

Response: The City of San Diego Fire Department (SDFD) was first to arrive at the scene. The wreckage of the aircraft was still smoldering and air quality was one of the primary concerns. After a brief consultation with the on-scene Marine Corps representative, the SDFD initiated air monitoring at the crash site (encompassing 4406 and 4416 Cather Avenue) and its perimeter with hand-held instruments. The instruments tested for decomposition products that would be expected from the jet fuel and the materials comprising the aircraft.

The SDFD requested that the County of San Diego Hazardous Incident Response Team (HIRT) be dispatched to set up an air monitoring network downwind of the crash site. The HIRT network instruments monitored the area for oxygen concentrations, volatile organic compounds, flammable vapors, chlorine and ammonia gases, and radiation. No abnormal readings were detected by the network instruments during their operation. The emergency response air monitoring concluded when the fire associated with the jet crash was completely extinguished.

After the fire was extinguished, the Marine Corps sprayed wax on the aircraft wreckage to mitigate the possible release of carbon fibers comprising the body of the aircraft from becoming airborne

2. Who is overseeing the site clean-up?

Response: The Marine Corps entered the Voluntary Assistance Program (VAP) on the day after the jet crash (December 9, 2008). The VAP is sponsored by the County's Department of Environmental Health, Site Assessment and Mitigation Program and provides project oversight for privately-funded investigations of contaminated, or potentially contaminated, properties. Staff professionals offer applicants consultation with respect to site assessment and corrective action activities, as well as report reviews, concurrence, and site closure letters.

The Marine Corps removed the aircraft wreckage and debris from the crash site and temporarily stored it at MCAS Miramar for evaluation. A contractor was engaged to perform demolition and debris removal at the site. Construction and foundation materials, landscape debris, damaged vehicles, and ash were placed in bins and disposed at local landfills in accordance with applicable regulations. The site was graded and measures were taken to prevent soil erosion and

transport by storm water. A chain-link fence with locking gate and screening was installed around the site perimeter to prevent public access during the environmental investigation.

3. What kinds of samples were collected to assess the potential health and environmental effects of the jet crash?

Response: Air, soil, and water samples were collected during the initial phase of the environmental investigation, which coincided with the demolition of structures at the crash site and the removal of debris (December 10, 2008 through January 20, 2009).

Air samples were monitored around the perimeter of the crash site. These samples were tested for the presence of particulates, including asbestos, metal dust, and respirable silica.

Soil samples were collected from surface soils at the crash site and from the yards of residential lots near the site. The samples were tested for petroleum hydrocarbons, metals, and asbestos. "Background" samples were collected from residential yards located outside of the crash debris field. The background samples were tested to establish the concentrations of naturally-occurring metals in neighborhood soils. [Note that neither asbestos nor petroleum hydrocarbons would be expected to be naturally-occurring constituents of these soils].

Water samples were collected from three swimming pools near the crash site. The pool samples were tested for oil and grease, as well as petroleum hydrocarbons.

4. What were the sample results for the air, soil, and water samples collected during the initial environmental investigation?

Response: Site perimeter air sampling results indicated that none of the particulates tested (asbestos, metal dust, and respirable silica) presented a health hazard to site workers or the public during site clean-up activities.

Oil, grease, and petroleum hydrocarbons were not detected in the swimming pool samples.

Asbestos was not detected in the soil samples. Detected levels of metals in the soil were comparable to concentrations of naturally-occurring metals found in the background soil samples. However, jet fuel (JP-5) was detected in soil samples collected from an area located in the northeast portion of the crash site.

5. What is known about the release of jet fuel (JP-5) at the crash site?

Response: When the jet aircraft crashed, a leak occurred from a damaged fuel tank on one of the wings. Some staining of the soil was noted, as well as the presence of a faint odor. Soil sample tests confirmed that JP-5 had been released in the northeast corner of the residential lot at 4406 Cather Avenue. Jet fuel was not detected in soil samples collected elsewhere on the site, where it presumably would have been consumed by the crash-related fire.

## 6. Is the site safe?

Response: The site has been off-limits to the public and secured since the completion of demolition and debris removal activities. A partial excavation of the soil impacted by the JP-5 was performed on February 4, 2009. The soil was transported to a disposal facility in Beatty, Nevada, in accordance with applicable regulations.

A second phase of the environmental investigation is ongoing to assess whether further excavation of the soils impacted by JP-5 is needed. Upon completion of the investigation, the Marine Corps will submit a report to DEH for review under the Voluntary Assistance Program. If the results of the investigation indicate that the site presents no human health hazard, the case will be evaluated for closure.

## 7. When will the neighborhood be able to get back to normal?

Response: Environmental investigation and remedial efforts at the site are nearing an end. The Marine Corps and its consultant will begin final report preparation in March 2009 and submit it to the County for review and concurrence. When a closure letter is issued, the owners of the properties at the crash site will be able to initiate re-building efforts.